Applicant: Stephen J. Doxsey Attorney's Docket No.: 07917-162001 / UMMC 02-23

Serial No.: 10/663,433

Filed: September 15, 2003

Page : 2 of 5

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

- 1. (currently amended) An isolated nucleic acid comprising SEQ ID NO:1, or a complementary sequence, fragment, or analog thereof.
- 2. (currently amended) An isolated nucleic acid consisting of SEQ ID NO:1, or a complementary sequence, fragment, or analog thereof.
- 3. (original) A vector comprising the nucleic acid molecule of claim 1.
- 4. (currently amended) A cell comprising the nucleic acid molecule vector of claim [[1]] 3.
- 5. (original) An isolated polypeptide encoded by the nucleic acid comprising SEQ ID NO:1, or a degenerate sequence, fragment, or analog thereof.
- 6. (original) An isolated polypeptide encoded by the nucleic acid consisting of SEQ ID NO:1, or a degenerate sequence, fragment, or analog thereof.
- 7. (original) An isolated polypeptide comprising SEQ ID NO:2, or a fragment or analog thereof.
- 8. (original) The polypeptide of claim 7, wherein the analog comprises conservative amino acid substitutions.
- 9. (original) An isolated polypeptide consisting of SEQ ID NO:2, or a fragment or analog thereof.
- 10. (original) The polypeptide of claim 9, wherein the analog comprises conservative amino acid substitutions.

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Serial No.: 10/663,433

Filed: September 15, 2003

Page : 3 of 5

11. (original) A method of reducing cell division, the method comprising administering to a cell an amount of a centriolin modulator effective to disrupting microtubule organization in the cell, wherein cell division is reduced.

- 12. (original) The method of claim 11, wherein the centriolin modulator is an RNAi.
- 13. (original) The method of claim 11, wherein the centriolin modulator is an siRNA.
- 14. (original) The method of claim 13, wherein the siRNA is SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, or SEQ ID NO:15.
- 15. (original) The method of claim 11, wherein the centriolin modulator is an antisense nucleic acid.
- 16. (original) The method of claim 11, wherein the centriolin modulator is a ribozyme.
- 17. (original) The method of claim 11, wherein the centriolin modulator is a antibody.
- 18. (original) The method of claim 17, wherein the antibody is produced in vivo.
- 19. (original) The method of claim 17, wherein the antibody is produced in vitro.
- 20. (original) The method of claim 11, wherein cell division is reduced to treat cancer, leukemia, psoriasis, Hodgkin's disease, lymphoma, myelofibrosis, polycythemia vera, or another cell proliferative disorder.
- 21. (original) A method of reducing cell division, the method comprising administering to a cell an amount of a pericentrin-B modulator effective to disrupt microtubule organization in the cell, wherein cell division is reduced.
- 22. (original) The method of claim 21, wherein the pericentrin-B modulator is an RNAi.
- 23. (original) The method of claim 21, wherein the pericentrin-B modulator is an siRNA.

Applicant: Stephen J. Doxsey Attorney's Docket No.: 07917-162001 / UMMC 02-23

Serial No.: 10/663,433

Filed: September 15, 2003

Page : 4 of 5

24. (original) The method of claim 23, wherein the siRNA is SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, or SEQ ID NO:23.

- 25. (original) The method of claim 21, wherein the pericentrin-B modulator is an antisense nucleic acid.
- 26. (original) The method of claim 21, wherein the pericentrin-B modulator is a ribozyme.
- 27. (original) The method of claim 21, wherein the pericentrin-B modulator is a antibody.
- 28. (original) The method of claim 27, wherein the antibody is produced in vivo.
- 29. (original) The method of claim 27, wherein the antibody is produced in vitro.
- 30. (original) The method of claim 21, wherein cell division is reduced to treat cancer, leukemia, psoriasis, Hodgkin's disease, lymphoma, myelofibrosis, polycythemia vera, or another cell proliferative disorder.
- 31. (original) A method of treating abnormal centrosome function in a cell, the method comprising administering to the cell an amount of centriolin effective to restore normal centrosome function, wherein normal centrosome function is restored.
- 32. (original) A method of treating abnormal centrosome function in a cell, the method comprising administering to the cell an amount of pericentrin-B effective to restore normal centrosome function, wherein normal centrosome function is restored.